



Pharmaceutical  
Society of Australia

Self Care  
™ Health Advice for Life

# Vision Impairment

**Approximately half a million Australians are blind or vision impaired. Approximately 80% of blindness and vision loss is caused by 5 conditions: age-related macular degeneration, cataract, diabetic retinopathy, glaucoma and refractive error. Regular eye tests can detect eye conditions early, helping to prevent deterioration in vision.**

## How eyes work

The eye works like a camera. The cornea, iris, pupil and lens act to focus light onto the retina. The retina is sensitive to light and acts like the film in a camera. It captures images and sends them via the optic nerve to the brain, where the images are interpreted.

## Age-related macular degeneration

Age-related macular degeneration (AMD) most frequently affects people over the age of 50. It damages a small area of the retina called the macula, which is responsible for central vision. Side vision is not significantly affected.

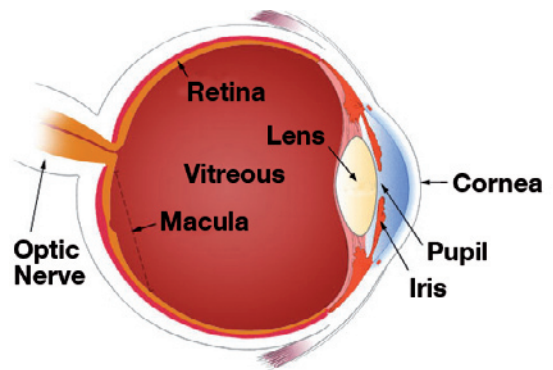
Risk factors for AMD include increasing age, family history of AMD and smoking.

Symptoms of AMD include:

- Difficulty reading or doing any activity requiring fine vision
- Distortion – straight lines appear wavy or bent
- Difficulty distinguishing faces or things in the central field of vision
- Dark patches or empty spaces in the central field of vision.

AMD may affect one or both eyes and is classified as 'dry' or 'wet'. Dry AMD, the most common form, usually causes gradual vision loss. Wet AMD often causes sudden changes in vision.

Current treatment for AMD aims to slow down or stop deterioration of the macula and preserve remaining sight. It cannot improve sight. Certain vitamins and minerals that are important for eye health may help people with AMD. Laser therapy and certain medicines may help people with wet AMD.



## Cataract

A cataract is a clouding in the lens of the eye, which changes the way light passes through the lens. Cataracts usually develop slowly and may occur in one or both eyes.

Risk factors for cataracts include increasing age, family history of cataracts, smoking, alcohol consumption and long-term sunlight exposure. Certain medical conditions (e.g., diabetes) and certain medicines (e.g., prednisolone) may also increase the risk of cataracts.

Symptoms of cataracts include:

- Cloudy, blurred or double vision
- Fading or yellowing of colours
- Poor night vision
- Increased sensitivity to glare. A halo may appear around lights.

Initially, cataracts may be managed with new spectacles, brighter lighting, anti-glare sunglasses and magnifying lenses. If these do not help, surgery is necessary to remove the cloudy lens and insert an artificial lens.

## Diabetic retinopathy

Diabetes can damage the blood vessels that nourish the retina, leading to retinal damage. Every diabetic is at risk of developing diabetic retinopathy, but tight control of blood glucose levels can prevent or delay vision loss. Laser treatment to the retina can help limit vision loss.

Diabetics should have an eye test at diagnosis, then at least every two years and more often if retinopathy develops.

## Glaucoma

Glaucoma is a disorder that damages the optic nerve. It is often associated with increased fluid pressure inside the eye. There are several different forms of glaucoma including open-angle glaucoma and acute closed-angle glaucoma.

Risk factors for glaucoma include increasing age, family history of glaucoma, high intra-ocular pressure, high refractive error, eye injury and certain medicines (e.g., prednisolone).

Open-angle glaucoma, the most common form, causes gradual vision loss. Vision loss occurs first at the sides and slowly spreads to include central vision. Symptoms may not occur in the early stages and many people are unaware they have glaucoma until their vision is significantly impaired.

Treatment for open-angle glaucoma aims to slow down or stop the damage process and preserve remaining sight. It cannot improve sight. Treatment may include:

- Regular eye drops to reduce intra-ocular pressure
- Laser treatment
- Surgery.

Acute closed-angle glaucoma develops rapidly and needs urgent treatment, usually with laser treatment or surgery. Symptoms of acute closed-angle glaucoma include eye pain, red eye, blurred vision, coloured rings around lights and sensitivity to light.

### Important

AMD, cataract, diabetic retinopathy, glaucoma and refractive error can only be diagnosed by examining the eyes with special instruments. The earlier these disorders are detected, the greater the chance of preserving remaining eyesight. Eye tests are available from optometrists or by referral from your doctor or optometrist to an ophthalmologist.

Have regular eye tests if:

- You are over the age of 40 years
- You have a family history of eye disease
- You have diabetes
- You notice any changes in your vision.

Your **Self Care** Pharmacist

## Refractive error

Refractive error means the eyes' inability to focus images clearly on the retina. Refractive errors include:

- Astigmatism (uneven focus)
- Hypermetropia (long-sightedness)
- Myopia (near-sightedness)
- Presbyopia (age-related changes).

Glasses, contact lenses and sometimes surgery can correct or improve refractive error.

## Self care

Consult an optometrist or ophthalmologist and maintain a healthy lifestyle to help protect your eyesight.

- Have regular eye tests.
- Eat regular, healthy meals, including plenty of fruits, vegetables and grain foods. Limit foods high in fat, sugar or salt.
- Exercise at a moderate level for at least 30 minutes on all or most days of the week.
- Don't smoke.
- Limit alcohol consumption.
- Wear sunglasses and hats to protect eyes from the UV rays in sunlight.

## Related fact cards

- *Contact Lens Care*
- *Glaucoma (website only – ask your pharmacist)*
- *Red and Dry Eyes*
- *Diabetes Type 1*
- *Diabetes Type 2*
- *Weight and Health*

## For more information

**An optometrist** – listed under 'O' in the yellow pages of the phone book

**Diabetes Australia** – phone 1300 136 588 or website [www.diabetesaustralia.com.au](http://www.diabetesaustralia.com.au)

**Glaucoma Australia** – phone 1800 500 880 or website [www.glaucoma.org.au](http://www.glaucoma.org.au)

**Guide Dogs Australia** – phone 1800 804 805 or website [www.guidedogsaustralia.com](http://www.guidedogsaustralia.com)

**Macular Degeneration Foundation** – phone 1800 111 709 or website [www.mdfoundation.com.au](http://www.mdfoundation.com.au)

**Optometrists Association Australia** – website [www.optometrists.asn.au](http://www.optometrists.asn.au)

**Vision 2020 Australia** – phone 03 9656 2020 or website [www.vision2020australia.org.au](http://www.vision2020australia.org.au)

**Vision Australia** – phone 1300 847 466 or website [www.visionaustralia.org.au](http://www.visionaustralia.org.au)

**Consumer Medicine Information (CMI)** leaflets – your pharmacist can advise on availability.

**NPS Medicines Line** – phone 1300 888 763 Monday to Friday, 9am to 6pm EST.

**The Poisons Information Centre** – in case of poisoning phone 131 126 from anywhere in Australia.

Pharmacists are medicines experts. Ask a pharmacist for advice when choosing a medicine.